

STIC-Biotech/ChemLib

183112

May

From: Vivlemore, Tracy
Sent: Friday, March 24, 2006 10:13 AM
To: STIC-Biotech/ChemLib
Subject: Sequence search request, application 10/619253

Hello,

For application 10/619,253 please perform a score over length search of nucleotides 2989-3054 of SEQ ID NO: 3. The length is 15-25 and the cutoff is 90%.

Thank you,

Tracy Vivlemore PhD
Remsen 2B-02, AU 1635
Mailbox: 2C-18
Tel: 571-272-2914

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Searcher: CD
Searcher Phone: 22504
Date Searcher Picked up: 3/27/06
Date completed: 3/27/06
Searcher Prep Time: CO
Online Time: CO

Type of Search
NA# AA#: _____
S/L: Oligomer: _____
Encode/Transl: _____
Structure #: _____ Text: _____
Inventor: _____ Litigation: _____

Vendors and cost where applicable
STN: _____
DIALOG: _____
QUESTEL/ORBIT: _____
LEXIS/NEXIS: _____
SEQUENCE SYSTEM:
WWW/Internet: _____
Other (Specify): _____

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us-10-619-253-3_2989_3054.rnpbn5

GenCore version 5.1.7
(c) 1993 - 2006 Biocceleration Ltd.

PRIOR APPLICATION NUMBER: 60/567,949
PRIOR FILING DATE: 2004-05-03
NUMBER OF SEQ ID NOS: 673904
INVENTOR: Yamamoto, Hiroshi; Sennance, Masaru; Generator, Yuki

Run on: March 27, 2006, 08:31:13 ; Search time 0.001 Seconds
(without alignments)
45.936 Million cell updates/sec

Title: US-10-619-253-3
Perfect score: 66
Sequence: t caggcagctccctctgcac. ctgttttttttgaagta 66
Scoring table: IDENTITY_NUC
Gapopen: 10.0 , **Gapext:** 0.5

Searched: 17 seqs, 348 residues

Total number of hits satisfying chosen parameters: 34

Next running minimum match 04
Minimum DB seq length: 15
Maximum DB seq length: 25

post-processing: Minimum Match 0% Maximum Match 100% Listing first 17 summaries

Database : us-10-619-253-3_2989_3054.rnpbn4:*

pred. No. is the number of results predicted score greater than or equal to the score of t and is derived by analysis of the total score

SUMMARIES

Result	Score	Query	Match	Length	DB	ID
No						

1 25 37.9 25 1 US-11-121-84

3 2
21 31.8
21 31.8
21 1
US-10-923-45
US-10-923-45

5 4
21 31.8
21 31.8
21 1
US-10-923-45
US-10-923-45

0 0
1 7 6
2 3 1
3 3 1.8
4 2 0
5 3 0.3
6 2 0
7 1 1
8 US-10-923-45
9 US-10-310-91

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C 15 19 28.8 19 1 US-10-923-45
C 16 19 28.8 19 1 US-10-923-45

C 17 19 28.8 19 1 US-10-923-45

ALIGNMENTS

RESULT 1
US-11-121-849-244253
Sequence 244253, Application US/11121849
Publication No. US20050272080A1
GENERAL INFORMATION:
APPLICANT: John Palma
TITLE OF INVENTION: Methods of Genetic Analysis
TITLE OF INVENTION: Microarrays
FILE REFERENCE: 3664.1
CURRENT APPLICATION NUMBER: US/11/121,849
CURRENT FILING DATE: 2005-05-03

RESULT 3
US-10-933-451-800
; Sequence 800, Application US/10923451

Publication No. US20050256068A1

GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics, Inc.

APPLICANT: McSriegen, James

APPLICANT: Thompson, James

APPLICANT: Beigelman, Leonid

TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearyl-CoA Desaturase

FILE REFERENCE: (SCD) Gene Expression Using Short Interfering Nucleic Acid (sRNA)

SEQUENCE 802, Application US/10923451

Publication No. US20050256068A1

GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics, Inc.

APPLICANT: McSriegen, James

APPLICANT: Beigelman, Leonid

TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearyl-CoA Desaturase

FILE REFERENCE: (SCD) Gene Expression Using Short Interfering Nucleic Acid (sRNA)

CURRENT APPLICATION NUMBER: US/10/923,451

CURRENT FILING DATE: 2004-08-20

NUMBER OF SEQ ID NOS: 810

SOFTWARE: PatentIn version 3.3

SEQ ID NO 800

LENGTH: 21

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE: OTHER INFORMATION: Description of Artificial Sequence: Synthetic

FEATURE: NAME/KEY: misc_feature

LOCATION: (3)..(5)

OTHER INFORMATION: 2'-O-Methyl

FEATURE: NAME/KEY: misc_feature

LOCATION: (8)..(8)

OTHER INFORMATION: 2'-O-Methyl

FEATURE: NAME/KEY: misc_feature

LOCATION: (11)..(11)

OTHER INFORMATION: 2',-O-Methyl

FEATURE: NAME/KEY: misc_feature

LOCATION: (1)..(2)

OTHER INFORMATION: 2'-O-Methyl

FEATURE: NAME/KEY: misc_feature

LOCATION: (6)..(7)

OTHER INFORMATION: 2'-O-Methyl or 2'-deoxy-2'-Fluoro

FEATURE: NAME/KEY: misc_feature

LOCATION: (8)..(8)

OTHER INFORMATION: 2',-O-Methyl

FEATURE: NAME/KEY: misc_feature

LOCATION: (9)..(10)

OTHER INFORMATION: 2'-O-Methyl or 2'-deoxy-2'-Fluoro

FEATURE: NAME/KEY: misc_feature

LOCATION: (11)..(11)

OTHER INFORMATION: 2',-O-Methyl

FEATURE: NAME/KEY: misc_feature

LOCATION: (12)..(19)

OTHER INFORMATION: 2',-O-Methyl or 2'-deoxy-2'-Fluoro

FEATURE: NAME/KEY: misc_feature

LOCATION: (1)..(1)

OTHER INFORMATION: 5'-3' attached terminal deoxyabasic moiety, inverted abasic

FEATURE: NAME/KEY: misc_feature

LOCATION: (21)..(21)

OTHER INFORMATION: 3'-3' attached terminal deoxyabasic moiety, inverted abasic

FEATURE: NAME/KEY: misc_feature

LOCATION: (1)..(19)

OTHER INFORMATION: inverted nucleotide or other terminal cap that is optionally present

FEATURE: NAME/KEY: misc_feature

LOCATION: (1)..(19)

OTHER INFORMATION: RNA

US-10-923-451-800

RESULT 4

Query Match 31.8%; Score 21; DB 1; Length 21;

Best Local Similarity 66.7%; Prod. No. 4.2;

Matches 14; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY :|||||||:||||:||:|

3027 CTGAACTCTCTCTCTTT 3047

Db 1 CUGAACACUCUCCUUTT 21

US-10-923-451-804

RESULT 5

Query Match 31.8%; Score 21; DB 1; Length 21;

Best Local Similarity 66.7%; Prod. No. 4.2;

Matches 14; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY :|||||||:||||:||:|

3027 CTGAACTCTCTCTCTTT 3047

Db 1 CUGAACACUCUCCUUTT 21

US-10-923-451-804

SEQUENCE 804, Application US/10923451

Publication No. US20050256068A1

GENERAL INFORMATION:

APPLICANT: Sirna Therapeutics, Inc.

APPLICANT: McSriegen, James

APPLICANT: Thompson, James

APPLICANT: Beigelman, Leonid

TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearyl-CoA Desaturase

FILE REFERENCE: (SCD) Gene Expression Using Short Interfering Nucleic Acid (sRNA)

CURRENT APPLICATION NUMBER: US/10/923,451

CURRENT FILING DATE: 2004-08-20

NUMBER OF SEQ ID NOS: 810

SOFTWARE: PatentIn version 3.3

SEQ ID NO 804

LENGTH: 21

TYPE: DNA

ORGANISM: Artificial Sequence

FEATURE:

us-10-619-253-3_2989_3054.rnphn5

OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (3)..(5)
 OTHER INFORMATION: 2'-deoxy
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (11)..(11)
 OTHER INFORMATION: 2'-deoxy
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (11)..(12)
 OTHER INFORMATION: 2'-deoxy-2'-Fluoro
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (9)..(10)
 OTHER INFORMATION: 2'-deoxy-2'-Fluoro
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (12)..(19)
 OTHER INFORMATION: 2'-deoxy-2'-Fluoro
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (1)..(1)
 OTHER INFORMATION: 5'-3 attached terminal deoxyabasic moiety, inverted abasic, other information: inverted nucleotide or other terminal cap, that is optionally present
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (21)..(21)
 OTHER INFORMATION: 3'-3 attached terminal deoxyabasic moiety, inverted abasic, other information: inverted nucleotide or other terminal cap, that is optionally present
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (11)..(19)
 OTHER INFORMATION: RNA
 ; US-10-923-451-804

Query Match 31.8%; Score 21; DB 1; length 21;

Best Local Similarity 66.7%; Pred. No. 4.2; Mismatches 0; Indels 0; Gaps 0;

Matches 14; Conservative 7; Mismatches 0; Indels 0; Gaps 0;

QY 3027 CTGAAACCTGCTTCCTTT 3047
 Db 1 CUGAACCACTGGUCUCAUTT 21

RESULT 6

US-10-923-451-805
 ; Sequence 805, Application US/10923451

; Publication No. US20050225608A1
 ; GENERAL INFORMATION:

; APPLICANT: Sirna Therapeutics, Inc.
 ; APPLICANT: McSwiggen, James
 ; APPLICANT: Thompson, James
 ; APPLICANT: Beigelman, Leonid

; TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearoyl-CoA Desaturase

; FILE REFERENCE: 400/210 (MBB02_1030_C)
 ; CURRENT APPLICATION NUMBER: US/10/923,451

; CURRENT FILING DATE: 2004-08-20
 ; NUMBER OF SEQ ID NOS: 810

; SOFTWARE: PatentIn version 3.3
 ; SEQ ID NO 805
 ; LENGTH: 21
 ; TYPE: DNA

ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: Synthetic

FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (1)..(2)

FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (9)..(10)

FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (6)..(7)

FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (12)..(19)

FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (9)..(10)

FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (1)..(2)

FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (6)..(7)

FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (1)..(2)

Page 3

LOCATION: (15)..(17)
 OTHER INFORMATION: 2'-deoxy-2'-Fluoro
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (1)..(19)
 OTHER INFORMATION: RNA
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (20)..(20)
 OTHER INFORMATION: Phosphorothioate or Phosphorodithioate 3'-Internucleotide Linkage
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (21)..(21)
 OTHER INFORMATION: 3'-3 attached terminal glyceryl moiety or inverted deoxyabasic (or
 US-10-923-451-803
 Query Match 30.3%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 5.1; Mismatches 0; Indels 0; Gaps 0;
 Matches 20; Conservative 0;
 Qy 3026 ACTGAAACACTGTCTCTT 3045
 Db 20 ACTGAAACACTGTCTCTT 1
 RESULT 11
 US-10-923-451-806/c
 Sequence 806, Application US/10923451
 Publication No. US20050256068A1
 GENERAL INFORMATION:
 APPLICANT: Sirna Therapeutics, Inc.
 APPLICANT: McSwiggen, James
 APPLICANT: Thompson, James
 APPLICANT: Beigelman, Leonid
 TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearyl-CoA Desaturase
 TITLE OF INVENTION: (SCD) Gene Expression Using Short Interfering Nucleic Acid (sINA)
 FILE REFERENCE: 400/210 (MBHB02-1030-C)
 CURRENT APPLICATION NUMBER: US/10/923,451
 CURRENT FILING DATE: 2004-08-20
 NUMBER OF SEQ ID NOS: 810
 SOFTWARE: PatentIn version 3.3
 SEQ ID NO 806
 LENGTH: 21
 TYPE: DNA
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: Synthetic
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (1)..(8)
 OTHER INFORMATION: 2'-deoxy
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (10)..(11)
 OTHER INFORMATION: 2'-deoxy
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (13)..(14)
 OTHER INFORMATION: 2'-deoxy
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (18)..(19)
 OTHER INFORMATION: 2'-deoxy
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (19)..(9)
 OTHER INFORMATION: 2'-deoxy-2'-Fluoro
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: (11)..(12)
 OTHER INFORMATION: 2'-deoxy-2'-Fluoro
 FEATURE:
 NAME/KEY: misc_feature
 RESULT 12
 US-10-923-451-167
 Sequence 167, Application US/10923451
 Publication No. US20050256068A1
 GENERAL INFORMATION:
 APPLICANT: Sirna Therapeutics, Inc.
 APPLICANT: McSwiggen, James
 APPLICANT: Thompson, James
 APPLICANT: Beigelman, Leonid
 TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearyl-CoA Desaturase
 TITLE OF INVENTION: (SCD) Gene Expression Using Short Interfering Nucleic Acid (sINA)
 FILE REFERENCE: 400/210 (MBHB02-1030-C)
 CURRENT APPLICATION NUMBER: US/10/923,451
 CURRENT FILING DATE: 2004-08-20
 NUMBER OF SEQ ID NOS: 810
 SOFTWARE: PatentIn version 3.3
 SEQ ID NO 167
 LENGTH: 19
 TYPE: RNA
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Synthetic
 US-10-923-451-167
 Query Match 28.8%; Score 19; DB 1; Length 19;
 Best Local Similarity 84.2%; Pred. No. 6.8; Mismatches 3; Indels 0; Gaps 0;
 Matches 16; Conservative 3;
 Qy 2991 GGCAGCTCCCTCGCACA 3009
 Db 1 GGCAGCTCCCTCGCACA 19
 RESULT 13
 US-10-923-451-168
 Sequence 168, Application US/10923451
 Publication No. US20050256068A1
 GENERAL INFORMATION:
 APPLICANT: Sirna Therapeutics, Inc.
 APPLICANT: McSwiggen, James
 APPLICANT: Thompson, James
 APPLICANT: Beigelman, Leonid
 APPLICANT: McSwiggen, James
 TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearyl-CoA Desaturase
 TITLE OF INVENTION: (SCD) Gene Expression Using Short Interfering Nucleic Acid (sINA)
 FILE REFERENCE: 400/210 (MBHB02-1030-C)
 CURRENT APPLICATION NUMBER: US/10/923,451
 CURRENT FILING DATE: 2004-08-20
 NUMBER OF SEQ ID NOS: 810

US-10-923-451-457

Query Match 28.8%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 6.8;
Matches 19; Conservative 0; Mismatches 0;
Indels 0; Gaps 0;

QY 2991 GCGAGCTCCCTCTGACCA 3009
Db 19 GCGAGCTCCCTCTGACCA 1

RESULT 16
US-10-923-451-169

Sequence 169, Application US/10923451
Publication No. US20050256068A1
GENERAL INFORMATION:
APPLICANT: Sirna Therapeutics, Inc.
APPLICANT: McSwiggen, James
APPLICANT: Thompson, James
APPLICANT: Beigelman, Leonid
TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearoyl-CoA Desaturase
TITLE OF INVENTION: (SCD) Gene Expression Using Short Interfering Nucleic Acid (siRNA)
FILE REFERENCE: 400/210 (MBHB02-1030-C)
CURRENT APPLICATION NUMBER: US/10/923,451
CURRENT FILING DATE: 2004-08-20
NUMBER OF SEQ ID NOS: 810
SOFTWARE: PatentIn version 3.3
SEQ ID NO 169
LENGTH: 19

TYPE: RNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic

QY 3009 ACAGATCTCAGGTAC 3027
Db 1 ACAGATCTCAGGTAC 19

RESULT 17
US-10-923-451-458/c

Sequence 458, Application US/10923451
Publication No. US20050256068A1
GENERAL INFORMATION:
APPLICANT: Sirna Therapeutics, Inc.
APPLICANT: McSwiggen, James
APPLICANT: Thompson, James
APPLICANT: Beigelman, Leonid
TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearoyl-CoA Desaturase
TITLE OF INVENTION: (SCD) Gene Expression Using Short Interfering Nucleic Acid (siRNA)
FILE REFERENCE: 400/210 (MBHB02-1030-C)
CURRENT APPLICATION NUMBER: US/10/923,451
CURRENT FILING DATE: 2004-08-20
NUMBER OF SEQ ID NOS: 810
SOFTWARE: PatentIn version 3.3
SEQ ID NO 458
LENGTH: 19

TYPE: RNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic

QY 3009 ACAGATCTCAGGTAC 3027
Db 19 ACAGATCTCAGGTAC 1

RESULT 18
US-10-923-451-459/c

Sequence 459, Application US/10923451
Publication No. US20050256068A1
GENERAL INFORMATION:
APPLICANT: Sirna Therapeutics, Inc.
APPLICANT: McSwiggen, James
APPLICANT: Thompson, James
APPLICANT: Beigelman, Leonid
TITLE OF INVENTION: RNA Interference Mediated Inhibition of Stearoyl-CoA Desaturase
TITLE OF INVENTION: (SCD) Gene Expression Using Short Interfering Nucleic Acid (siRNA)
FILE REFERENCE: 400/210 (MBHB02-1030-C)
CURRENT APPLICATION NUMBER: US/10/923,451
CURRENT FILING DATE: 2004-08-20
NUMBER OF SEQ ID NOS: 810
SOFTWARE: PatentIn version 3.3
SEQ ID NO 459
LENGTH: 19

TYPE: RNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic

QY 3027 CTGACCACTGCTCTT 3045
Db 1 CTGACCACTGCTCTT 19

RESULT 19
US-10-923-451-169

Sequence 169, Application US/10923451
Publication No. US20050256068A1
GENERAL INFORMATION:
APPLICANT: Sirna Therapeutics, Inc.
APPLICANT: McSwiggen, James
APPLICANT: Thompson, James
APPLICANT: Beigelman, Leonid
TITLE OF INVENTION: (SCD) Gene Expression Using Short Interfering Nucleic Acid (siRNA)
FILE REFERENCE: 400/210 (MBHB02-1030-C)
CURRENT APPLICATION NUMBER: US/10/923,451
CURRENT FILING DATE: 2004-08-20
NUMBER OF SEQ ID NOS: 810
SOFTWARE: PatentIn version 3.3
SEQ ID NO 459
LENGTH: 19

TYPE: RNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Synthetic

QY 3027 CTGACCACTGCTCTT 3045
Db 1 CTGACCACTGCTCTT 19

Db 19 |||||CTGAAACACTGCTTCCTT 1

Search completed: March 27, 2006, 08:31:14
Job time : 0.001 secs

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GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd.
Om nucleic - nucleic search, using sw model

Run on: March 27, 2006, 08:30:11 ; Search time 0.001 Seconds
(without alignment)
13.200 Million cell updates/sec

Scoring table: 'IDENTITY_NTC
Gapop 10.0 , Gapext 0.5

Title: US-10-619-253-3
perfect score: 66
Sequence: 1 caggcagctccctctgacac.....ctgtttcttttgaagta 66

Searched: 5 seqs, 100 residues

Minimum DB seq length: 15
Maximum DB seq length: 25

Total number of hits satisfying chosen parameters: 10

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 5 summaries

Database : us-10-619-253-3_2989_3054.rnppbm4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
C 1	20	30.3	20 1	US-09-918-187-30 Sequence 30, Appl 1
C 2	20	30.3	20 1	US-10-484-442-30 Sequence 30, Appl 1
C 3	20	30.3	20 1	US-10-619-253-30 Sequence 30, Appl 1
C 4	20	30.3	20 1	US-10-619-253-124 Sequence 124, Appl 1
C 5	20	30.3	20 1	US-10-619-253-125 Sequence 125, Appl 1

ALIGNMENTS

RESULT 1
US-09-918-187-30/C
; Sequence 30, Application US/09918187
; Publication No. US20030083282A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF STEAROYL-COA DESATURASE EXPRESSION
; FILE REFERENCE: ISPH-0590
; CURRENT APPLICATION NUMBER: US/10/619,253
; CURRENT FILING DATE: 2003-07-15
; PRIOR APPLICATION NUMBER: US 09/918,187
; PRIOR FILING DATE: 2001-07-30
; SEQ ID NO 30
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE: OTHER INFORMATION: Antisense Oligonucleotide

RESULT 2
US-10-484-442-30/C
; Sequence 30, Application US/1048442
; Publication No. US20040254339A1
; GENERAL INFORMATION:
; APPLICANT: Isis Pharmaceutical, Inc.
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF STEAROYL-COA DESATURASE EXPRESSION
; FILE REFERENCE: ISPH-0695
; CURRENT APPLICATION NUMBER: US/10/484,442
; CURRENT FILING DATE: 2004-01-29
; PRIOR APPLICATION NUMBER: 09/918,187
; PRIOR FILING DATE: 2001-07-30
; SEQ ID NO 30
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE: OTHER INFORMATION: Antisense Oligonucleotide

RESULT 3
US-10-619-253-30/C
; Sequence 30, Application US/10619253
; Publication No. US20050043256A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; APPLICANT: Mark J. Graham
; TITLE OF INVENTION: ANTISENSE MODULATION OF STEAROYL-COA DESATURASE EXPRESSION
; FILE REFERENCE: ISPH-0590US.P1
; CURRENT APPLICATION NUMBER: US/10/619,253
; CURRENT FILING DATE: 2003-07-15
; PRIOR APPLICATION NUMBER: US 09/918,187
; PRIOR FILING DATE: 2001-07-30
; SEQ ID NO 30
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE: OTHER INFORMATION: Antisense Oligonucleotide

RESULT 4
US-10-619-253-124/C
; Sequence 124, Application US/10619253
; Publication No. US20050043256A1

Query Match 30.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Organism: Artificial sequence
Feature:
Other Information: Antisense Oligonucleotide

Query Match 30.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.4;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; TITLE OF INVENTION: ANTISENSE MODULATION OF STEAROYL-COA DESATURASE EXPRESSION
; FILE REFERENCE: ISPH-0590US.P1
; CURRENT APPLICATION NUMBER: US/10/619,253
; CURRENT FILING DATE: 2003-07-15
; PRIOR APPLICATION NUMBER: US 09/918,187
; PRIOR FILING DATE: 2001-07-30
; NUMBER OF SEQ ID NOS: 418
; SEQ ID NO 124
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-619-253-124

Query Match 30.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;4; Mismatches 0; Indels 0; Gaps 0;
Matches 20; Conservative 0; Nucleotide 0; Hyphen 0;

QY 3020 AGGGTCACTGAACTGCT 3039
Db |||||GAGGTCAGTGAACTGCT 1

RESULT 5
US-10-619-253-125/C
; Sequence 125, Application US/10619253
; Publication No. US20050043256A1
; GENERAL INFORMATION:
; APPLICANT: Rosanne M. Crooke
; TITLE OF INVENTION: ANTISENSE MODULATION OF STEAROYL-COA DESATURASE EXPRESSION
; FILE REFERENCE: ISPH-0590US.P1
; CURRENT APPLICATION NUMBER: US/10/619,253
; CURRENT FILING DATE: 2003-07-15
; PRIOR APPLICATION NUMBER: US 09/918,187
; PRIOR FILING DATE: 2001-07-30
; NUMBER OF SEQ ID NOS: 418
; SEQ ID NO 125
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Antisense Oligonucleotide
US-10-619-253-125

Query Match 30.3%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1;4; Mismatches 0; Indels 0; Gaps 0;
Matches 20; Conservative 0; Nucleotide 0; Hyphen 0;

QY 3035 CTGCTCTCTTGTGAACTGAAGTA 3054
Db |||||CTGCTCTCTTGTGAACTGAAGTA 1

Search completed: "March 27, 2006, 08:30:11
Job time : 0.001 secs

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OM nucleic - nucleic search, using sw model

Run on: March 27, 2006, 08:28:37 ; Search time 0.001 seconds
 (without alignments)
 61.908 Million cell updates/sec

Title: US-10-619-253-3

Perfect score: 66

Sequence: 1 caggaggccctctgac.....ctgtttcttttggaaatgta 66

Scoring table: IDENTITY_NUC , Gapext: 0.5

Searched: 23 seqs, 469 residues

Total number of hits satisfying chosen parameters: 46

Minimum DB seq length: 15

Maximum DB seq length: 25

Post-processing: Minimum Match 0*

Maximum Match 100*

Listing first 23 summaries

Database : us-10-619-253-3_2989_3054.rng4*

- Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match Length	DB	ID	Description
1	21	31.8	21	1	ADE27571	Stearoyl-CoA desat
2	21	31.8	21	1	ADE27669	Stearoyl-CoA desat
3	21	31.8	21	1	ADE27670	Stearoyl-CoA desat
4	20	30.3	20	1	ADE18221	Human Stearoyl-CoA desat
5	20	30.3	20	1	ADE18220	Human Stearoyl-CoA desat
6	20	30.3	20	1	ADE18126	Human Stearoyl-CoA desat
7	20	30.3	21	1	ADE27574	Stearoyl-CoA desat
8	20	30.3	21	1	ADE27570	Stearoyl-CoA desat
9	20	30.3	21	1	ADE27572	Stearoyl-CoA desat
10	20	30.3	21	1	ADE27675	Stearoyl-CoA desat
11	20	30.3	21	1	ADE14557	Human interleukin-1
12	20	30.3	21	1	ADE14559	Human interleukin-1
13	20	30.3	21	1	ADE14560	Human interleukin-1
14	20	30.3	21	1	ADE14555	Human interleukin-1
15	20	30.3	21	1	ADE27666	Stearoyl-CoA desat
16	20	30.3	22	1	ADE27668	Stearoyl-CoA desat
17	20	30.3	22	1	ADE27554	Stearoyl-CoA desat
18	19	28.8	19	1	ADE27225	Stearoyl-CoA desat
19	19	28.8	19	1	ADE27223	Stearoyl-CoA desat
20	19	28.8	19	1	ADE27513	Stearoyl-CoA desat
21	19	28.8	19	1	ADE27224	Stearoyl-CoA desat
22	19	28.8	19	1	ADE27515	Stearoyl-CoA desat
23	19	28.8	19	1	ADE27515	Stearoyl-CoA desat

ALIGNMENTS

RESULT 1

XX ADE27671

ID ADE27671 standard; RNA; 21 BP.

XX AC ADE27671;

RESULT 2

XX ADE27667

ID ADE27667 standard; RNA; 21 BP.

XX AC ADE27667;

XX DT 29-JAN-2004 (first entry)
 XX DB Stearoyl-CoA desaturase sINA oligonucleotide SEQ ID NO:626.
 XX KW short interfering nucleic acid; sINA; downregulation; inhibition; SCD; Stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic; antiarteriosclerotic; cytostatic; viricide; obesity; diabetes; atherosclerosis; cancer; viral infection; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss.

XX OS Synthetic.
 XX PN WO2003070885-A2.
 XX PD 28-AUG-2003.
 XX PF 13-FEB-2003; 2003WO-US004317.
 XX PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-036114P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 20-SEP-2002; 2002US-0412308P.
 PR 15-JAN-2003; 2003US-0440128P.
 XX PA (RIBO-) RIBOZYME PHARM INC.
 XX PI McSwiggen J, Beigelman L, Thompson J;
 XX DR WPI; 2003-721687/68.
 XX PT New short interfering nucleic acid, useful e.g. for treatment and diagnosis of obesity or diabetes, downregulates expression of the PT (RIBO-) RIBOZYME PHARM INC.
 XX PS Disclosure; SEQ ID NO 626; 139pp; English.

XX The present invention describes a short interfering nucleic acid (sINA) that downregulates expression of the SCD (stearoyl-CoA desaturase) gene by RNA interference. Also described: (1) modulating expression of SCD genes in cells, tissue explants or organisms by introduction of sINA; (2) kits for in vitro or in vivo delivery of sINA; (3) conjugates and/or complexes of sINA, and (4) vectors that express sINA. SCD inhibiting sINAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and viricide activities. The sINAs can be used to modulate expression of SCD genes, in cells, tissue explants or organisms, e.g. for treating obesity, diabetes (types I and II); atherosclerosis; cancer and viral infections. They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents an SCD sINA, which is used in the exemplification of the present invention.

XX SQ Sequence 21 BP; 3 A; 7 C; 2 G; 2 T; 7 U; 0 Other;

Query Match Similarity 31.8%; Score 21; DB 1; Length 21;
 Matches 66.7%; Pred. No. 5.4; 0; Indels 0; Gaps 0;

Qy 3027 CTGAACCACTGCTCTCTT 3047
 Db 1 CUGAACCAUCGCUUCUUT 21

DT 29-JAN-2004 (first entry)
 XX
 XX DE Stearyl-CoA desaturase siNA oligonucleotide SEQ ID NO:622.
 XX KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
 KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
 KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
 KW atherosclerosis; cancer; viral infection; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 OS Synthetic.
 XX
 PN WO2003070885-A2.
 XX
 PD 28-AUG-2003.
 XX
 PF 13-FEB-2003; 2003WO-US004317.
 XX
 PR 20-FEB-2002; 2002US-335880P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 20-SEP-2002; 2002US-0412204P.
 PR 20-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI McSwiggen J, Beigelman L, Thompson J;
 DR WPI; 2003-721687/68.
 XX
 PT New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of obesity or diabetes, downregulates expression of the
 PT stearoyl-CoA desaturase gene.
 XX
 PS Disclosure; SEQ ID NO 622; 139pp; English.
 XX
 CC The present invention describes a short interfering nucleic acid (siNA) that downregulates expression of the SCD (stearoyl-CoA desaturase) gene by RNA interference. Also described: (1) modulating expression of SCD genes in cells, tissue explants or organisms by introduction of siNA; (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA; and (4) vectors that express siNA. SCD inhibiting siNA have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and virucide activities. The siNA's can be used to modulate expression of SCD genes, in cells, tissue explants or organisms, e.g. for treating obesity; diabetes (types I and II); atherosclerosis, cancer and viral infections. They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents an SCD siNA, which is used in the exemplification of the present invention.
 XX
 SQ Sequence 21 BP; 3 A; 7 C; 2 G; 2 T; 7 U; 0 Other;
 Query Match 31.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 66.7%; Pred. No. 5,4;
 Matches 14; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
 QY 3027 CTGAACTCTGCTCTCTTT 3047
 DB 1 CUGAACACUGCUCUCCU 21
 RESULT 3
 ADB27659
 ID ADB27659 standard; RNA; 21 BP.
 XX
 AC ADB27659;
 DT 29-JAN-2004 (first entry)
 XX
 DT 29-JAN-2004 (first entry)
 XX
 XX DR Stearyl-CoA desaturase siNA oligonucleotide SEQ ID NO:624.
 XX KW short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
 KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
 KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
 KW atherosclerosis; cancer; viral infection; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 OS Synthetic.
 XX
 PN WO2003070885-A2.
 XX
 PD 28-AUG-2003.
 XX
 PF 13-FEB-2003; 2003WO-US004317.
 XX
 PR 20-FEB-2002; 2002US-035880P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409293P.
 PR 20-SEP-2002; 2002US-0412204P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI McSwiggen J, Beigelman L, Thompson J;
 DR WPI; 2003-721687/68.
 XX
 PT New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of obesity or diabetes, downregulates expression of the
 PT stearoyl-CoA desaturase gene.
 XX
 PS Disclosure; SEQ ID NO 624; 139pp; English.
 XX
 CC The present invention describes a short interfering nucleic acid (siNA) that downregulates expression of the SCD (stearoyl-CoA desaturase) gene by RNA interference. Also described: (1) modulating expression of SCD genes in cells, tissue explants or organisms by introduction of siNA; (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA; and (4) vectors that express siNA. SCD inhibiting siNA have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and virucide activities. The siNA's can be used to modulate expression of SCD genes, in cells, tissue explants or organisms, e.g. for treating obesity; diabetes (types I and II); atherosclerosis, cancer and viral infections. They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents an SCD siNA, which is used in the exemplification of the present invention.
 XX
 SQ Sequence 21 BP; 3 A; 7 C; 2 G; 2 T; 7 U; 0 Other;
 Query Match 31.8%; Score 21; DB 1; Length 21;
 Best Local Similarity 66.7%; Pred. No. 5,4;
 Matches 14; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
 QY 3027 CTGAACTCTGCTCTCTTT 3047
 DB 1 CUGAACACUGCUCUCCU 21
 RESULT 4
 ABZ77075/C
 ID ABZ77075 standard; DNA; 20 BP.
 XX
 AC ABZ77075;
 XX
 DT 07-MAY-2003 (first entry)
 XX

DE Human stearoyl-CoA desaturase phosphorothioate oligonucleotide SEQ:30.

XX Human; stearoyl-CoA desaturase; phosphorothioate; 2'-O-methoxyethyl;

KW 2'-MOE; cardiovascular; antiarrtherosclerotic; antilipaemic; cytosatic;

KW antiinflammatory; antisense therapy; antisense oligonucleotide; tumour;

KW abnormal lipid metabolism; abnormal cholesterol metabolism; infection;

KW atherosclerosis; cardiovascular disease; inflammation; inhibition; ss.

XX Homo sapiens.

OS Synthetic.

XX

FR Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT ; /note= "phosphorothioate linkages"

FT modified_base 1..5

FT /*tag= b

FT /mod_base= OTHER

FT ; /note= "2'-O-methoxyethyl (2'-MOE) gapmer"

FT modified_base 16..20

FT /*tag= c

FT /mod_base= OTHER

FT ; /note= "2'-O-methoxyethyl (2'-MOE) gapmer"

XX WO2003012031-A2.

XX PD 13-FEB-2003.

XX PF 16-JUL-2002; 2002WO-US022676.

XX PR 30-JUL-2001; 2001US-00918187.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Crooke RM, Graham MJ;

XX DR WPI; 2003-248160/24.

XX PN WO2003012031-A2.

XX PD 17-FEB-2003.

XX PF 15-JUL-2004; 2004WO-US018932.

XX PR 15-JUL-2003; 2003US-00619253.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Crooke RM, Graham MJ;

XX DR WPI; 2005-163213/17.

XX PN New compound comprising 8-50 nucleobases targeted to a nucleic acid molecule encoding stearoyl-CoA desaturase, useful in preparing a composition for treating a condition associated with stearoyl-CoA desaturase, e.g., obesity.

XX PS Claim 1; SEQ ID NO 125; 256pp; English.

XX CC The present invention describes a compound (I) that is 8-50 nucleobases in length targeted to a nucleic acid molecule encoding human stearoyl-CoA desaturase, and which specifically hybridises with and inhibits the expression of human stearoyl-CoA desaturase, or which specifically hybridises with at least an 8-nucleobase portion of an active site on a nucleic acid molecule encoding human stearoyl-CoA desaturase. Human stearoyl-CoA desaturase is mapped to chromosome 10. (I) has antilipaemic, cardiovascular, antiatherosclerotic, cytosatic and antiinflammatory activities, and can be used in antisense therapy. The antisense compounds (I) can be used for modulating the expression of human stearoyl-CoA desaturase and for treating diseases or conditions associated with expression of human stearoyl-CoA desaturase, e.g., abnormal lipid or cholesterol metabolism, atherosclerosis, or cardiovascular diseases. The antisense compounds (I) can also be used for diagnostics, therapeutics and prophylaxis, e.g., to prevent or delay infection, inflammation or tumour formation, as research reagents and kits, and in distinguishing between functions of various members of a biological pathway. The present sequence represents a human stearoyl-CoA desaturase inhibiting chimeric phosphorothioate antisense oligonucleotide, which is given in an example from the present invention.

XX Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

SQ 3003 CTGCTCTCTTGAAGTA 3054

QY 3011 AGATGCTCAGGTCACTGA 3030

Db 20 AGATGCTCAGGTCACTGA 1

RESULT 5

ID AUD18221/C

ID ADX18221 standard; DNA; 20 BP.

XX AC ADX18221;

XX DT 05-MAY-2005 (first entry)

XX DT 05-MAY-2005 (first entry)

XX DE Human Stearoyl-CoA desaturase antisense oligonucleotide ISIS 300912.

XX KW Antisense; gene therapy; Stearoyl-CoA desaturase; hypertension; KW hypotensive; non-insulin dependent diabetes; antidiabetic; KW endocrine disease; gastrointestinal disease; metabolic disorder; KW cyrotatic; neoplasm; obesity; anorectic; nutritional disorder; KW Cardiovascular disease; Dermatological disease; immune disorder; KW Neurological disease; ss.

XX OS Homo sapiens.

OS Synthetic.

XX

XX PN WO2005014607-A2.

XX PD 17-FEB-2005.

XX PF 15-JUL-2004; 2004WO-US018932.

XX PR 15-JUL-2003; 2003US-00619253.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Crooke RM, Graham MJ;

XX DR WPI; 2005-163213/17.

XX PN New compound comprising 8-50 nucleobases targeted to a nucleic acid molecule encoding stearoyl-CoA desaturase, useful in preparing a composition for treating a condition associated with stearoyl-CoA desaturase, e.g., obesity.

XX PS Claim 1; SEQ ID NO 125; 256pp; English.

XX CC The invention relates to a new compound, which is targeted to a nucleic acid molecule encoding stearoyl-CoA desaturase and inhibits its expression. The compound is useful in preparing a composition for treating an animal having a disease or condition associated with stearoyl-CoA desaturase, e.g., cardiovascular disorder, obesity, non-insulin dependent diabetes mellitus, a skin disease, hypertension, a neurological disease, an immune disorder or cancer. The present sequence represents a human stearoyl-CoA desaturase antisense oligonucleotide.

XX Sequence 20 BP; 9 A; 3 C; 4 G; 4 T; 0 U; 0 Other;

SQ 3003 CTGCTCTCTTGAAGTA 3054

QY 3003 CTGCTCTCTTGAAGTA 3054

Db 20 CTGCTCTCTTGAAGTA 1

RESULT 6

ID AUD18220/C

ID ADX18220 standard; DNA; 20 BP.

XX AC ADX18220;

XX DT 05-MAY-2005 (first entry)

Query Match 300..3%; Score 20; DB 1; Length 20;

Best Local Similarity 100.0%; Pred. No. 6..9;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DE	Human Stearyl-CoA desaturase antisense oligonucleotide ISIS 300911.
XX	WO2005014607-A2.
XX	Autisense; gene therapy; Stearyl-CoA desaturase; hypertension;
KW	hypertensive; non-insulin dependent diabetes; antidiabetic;
KW	endocrine disease; metabolic disorder; cancer;
KW	cytostatic; neoplasm; obesity; anorectic; nutritional disorder;
KW	Cardiovascular disease; Dermatological disease; Immune disorder;
KW	Neurological disease; ss.
OS	Homo sapiens.
OS	Synthetic.
XX	PN
XX	W02005014607-A2.
XX	PD
XX	17-FEB-2005.
XX	PP
XX	15-JUL-2004; 2004WO-US018932.
PR	15-JUL-2003; 2003US-00619253.
PA	(ISIS-) ISIS PHARM INC.
XX	PA
PI	Crooke RM, Graham MJ;
XX	DR
DR	WPI; 2005-163213/17.
PT	New compound comprising 8-50 nucleobases targeted to a nucleic acid
PT	molecule encoding Stearyl-CoA desaturase, useful in preparing a
PT	composition for treating a condition associated with Stearyl-CoA
PT	desaturase, e.g., obesity.
PA	Example 15; SEQ ID NO 30; 256pp; English.
XX	SQ
CC	The invention relates to a new compound, which is targeted to a nucleic
CC	acid molecule encoding Stearyl-CoA desaturase and inhibits its
CC	expression. The compound is useful in preparing a composition for
CC	treating an animal having a disease or condition associated with Stearyl
CC	-CoA desaturase, e.g. cardiovascular disorder, obesity, non-insulin-
CC	dependent diabetes mellitus, a skin disease, hypertension, a neurological
CC	disease, an immune disorder or cancer. The present sequence represents a
CC	human Stearyl-CoA desaturase antisense oligonucleotide.
XX	SQ
CC	Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
CC	Query Match 30.3%; Score 20; DB 1; Length 20;
CC	Best Local Similarity 100.0%; Pred. No. 6.9;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	QY
CC	3020 AGGTCAGTGAACTCT 3039
CC	Db 20 AGGGTCACTGAACTCT 1
QY	3011 AGAATGCTCAGGGCACTGA 3030
Db	20 AGAATGCTCAGGGCACTGA 1
XX	RESULT 8
XX	ADE27674/C
ID	ADE27674 standard; RNA; 21 BP.
XX	AC
AC	ADE27674;
XX	DT
29-JAN-2004 (first entry)	DE
XX	Stearoyl-CoA desaturase siNA oligonucleotide SEQ ID NO:629.
XX	KW
KW	short interfering nucleic acid; siNA; downregulation; inhibition; SCD;
KW	Stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
KW	antiarrtherosclerotic; cytostatic; virucide; obesity; diabetes;
KW	atherosclerosis; cancer; viral infection; drug screening;
KW	genetic engineering; pharmacogenomic; gene mapping; ss.
XX	OS
OS	Synthetic.
XX	PN
XX	W02003070885-A2.
XX	PD
XX	28-AUG-2003.
XX	PP
13-FEB-2003; 2003WO-US004317.	PR
PR	20-FEB-2003; 2002US-035880P.
PR	11-MAR-2003; 2002US-036124P.
PR	06-JUN-2002; 2002US-0386782P.
PR	29-AUG-2002; 2002US-0406784P.
PR	05-SEP-2002; 2002US-0408378P.
PR	09-SEP-2002; 2002US-040293P.

PR	15-JAN-2003; 2003US-0440129P.	XX	PA	(RIBO-) RIBOZYME PHARM INC.
XX		XX	PA	
XX		XX	PI	Mcswiggen J, Beigelman L, Thompson J;
XX		XX	PT	
XX		XX	DR	WPI; 2003-721687/68.
XX	New short interfering nucleic acid, useful e.g. for treatment and diagnosis of obesity or diabetes, downregulates expression of the stearoyl-CoA-desaturase gene.	PT		
XX		PT		
XX	PS Disclosure; SEQ ID NO 629; 139pp; English.	PS		
XX	The present invention describes a short interfering nucleic acid (sINA) that downregulates expression of the SCD (stearoyl-CoA desaturase) gene by RNA interference. Also described: (1) modulating expression of SCD genes in cells, tissue explants or organisms by introduction of sINA; (2) kits for in vitro or in vivo delivery of sINA; (3) conjugates and/or complexes of sINA; and (4) vectors that express sINA. SCD inhibiting sINAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and virucide activities. The sINAs can be used to modulate expression of SCD genes, in cells, tissue explants or organisms, e.g. for treating obesity, genes in cells, tissue explants or organisms, e.g. for treating obesity, diabetes (types I and II); atherosclerosis; cancer and viral infections. They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents an SCD sINA, which is used in the exemplification of the present invention.	CC		
XX	Sequence 21 BP; 7 A; 2 C; 7 G; 2 T; 3 U; 0 Other;	SQ		
XX	Query Match 30.3%; Score 20; DB 1; Length 21; Best Local Similarity 100.0%; Pred. No. 6.6; Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;	Match		
XX	Qy 3026 ACTGAAACCACTGCTCTCTT 3045	Qy		
XX	Db 20 ACTGAAACCACTGCTCTCTT 1	Db		
XX	RESULT 9	RESULT 10		
XX	ADE27670/c	ADE27672/c		
XX	ABE27670 standard; RNA; 21 BP.	ID ADE27672 standard; RNA; 21 BP.		
XX	AC ADE27670;	AC ADE27672;		
XX	DT 29-JAN-2004 (first entry)	DT 29-JAN-2004 (first entry)		
XX	DE Stearoyl-CoA desaturase sINA oligonucleotide SEQ ID NO:625.	DE Stearoyl-CoA desaturase sINA oligonucleotide SEQ ID NO:627.		
XX	KW short interfering nucleic acid; sINA; downregulation; inhibition; SCD; stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic; antiarteriosclerotic; cytostatic; virucide; obesity; diabetes; atherosclerosis; cancer; viral infection; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss.	KW short interfering nucleic acid; sINA; downregulation; inhibition; SCD; Stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic; antiarteriosclerotic; cytostatic; virucide; obesity; diabetes; atherosclerosis; cancer; viral infection; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss.		
XX	OS Synthetic.	OS Synthetic.		
XX	PN WO2003070885-A2.	PN WO2003070885-A2.		
XX	PD 28-AUG-2003.	PD 28-AUG-2003.		
XX	PP 13-FEB-2003; 2003WO-US004317.	PP 13-FEB-2003; 2003WO-US004317.		
XX	PR 20-FEB-2002; 2002US-0358580P.	PR 20-FEB-2002; 2002US-0358580P.		
PR 11-MAR-2002; 2002US-0361124P.	PR 11-MAR-2002; 2002US-0361124P.			
PR 06-JUN-2002; 2002US-0386782P.	PR 06-JUN-2002; 2002US-0386782P.			
PR 29-AUG-2002; 2002US-0406784P.	PR 29-AUG-2002; 2002US-0406784P.			
PR 05-SEP-2002; 2002US-0408378P.	PR 05-SEP-2002; 2002US-0408378P.			
PR 09-SEP-2002; 2002US-0409239P.	PR 09-SEP-2002; 2002US-0409239P.			
PR 20-SEP-2002; 2002US-0412049P.	PR 20-SEP-2002; 2002US-0412049P.			
PR 15-JAN-2003; 2003US-0440129P.	PR 15-JAN-2003; 2003US-0440129P.			

PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI McSwiggen, J., Beigelman, L., Thompson, J.;
 XX
 DR WPI; 2003-721687/68.
 XX
 PT New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of obesity or diabetes, downregulates expression of the
 PT stearyl-CoA desaturase gene.
 XX
 PS Disclosure; SEQ ID NO 627; 139pp; English.
 XX
 CC The present invention describes a short interfering nucleic acid (siRNA)
 CC that downregulates expression of the SCD (stearoyl-CoA desaturase) gene
 CC by RNA interference. Also described: (1) modulating expression of SCD
 CC genes in cells, tissue explants or organisms by introduction of siRNA; (2)
 CC kits for in vitro or in vivo delivery of siRNA; (3) conjugates and/or
 CC complexes of siRNA; and (4) vectors that express siRNA. SCD inhibiting
 CC siRNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
 CC virucide activities. The siRNAs can be used to modulate expression of SCD
 CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
 CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
 CC They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents an SCD siRNA, which is
 CC used in the exemplification of the present invention.
 XX
 SQ Sequence 21 BP; 7 A; 2 C; 7 G; 2 T; 3 U; 0 Other;
 *Query Match 30.3%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.6;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 3026 ACTGAACTGCTCTCTT 3045
 Db 20 ACTGAACTGCTCTCTT 1

RESULT 11
 ADE27675/C
 ID ADE27675 standard; RNA; 21 BP.
 XX
 AC ADE27675;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Stearyl-CoA desaturase siRNA oligonucleotide SEQ ID NO:630.
 XX
 KW short interfering nucleic acid; siRNA; downregulation; inhibition; SCD;
 KW stearyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
 KW antiarteriosclerotic; cytostatic; virucide; obesity; diabetes;
 KW atherosclerosis; cancer; viral infection; drug screening;
 KW genetic engineering; pharmacogenomic; gene mapping; ss.
 OS Synthetic.
 XX
 PN WO2003070885-A2.
 XX
 PD 28-AUG-2003.
 XX
 PP 13-FEB-2003; 2003WO-US004317.
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386792P.
 PR 29-AUG-2002; 2002US-0406794P.
 PR 05-SEP-2002; 2002US-0408318P.
 PR 09-SEP-2002; 2002US-0409233P.
 PR 20-SEP-2002; 2002US-0412314P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.

XX
 PI McSwiggen, J., Beigelman, L., Thompson, J.;
 XX
 DR WPI; 2003-721687/68.
 XX
 PT New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of obesity or diabetes, downregulates expression of the
 PT stearyl-CoA desaturase gene.
 XX
 PS Disclosure; SEQ ID NO 630; 139pp; English.
 XX
 CC The present invention describes a short interfering nucleic acid (siRNA)
 CC that downregulates expression of the SCD (stearoyl-CoA desaturase) gene
 CC by RNA interference. Also described: (1) modulating expression of SCD
 CC genes in cells, tissue explants or organisms by introduction of siRNA; (2)
 CC kits for in vitro or in vivo delivery of siRNA; (3) conjugates and/or
 CC complexes of siRNA; and (4) vectors that express siRNA. SCD inhibiting
 CC siRNAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and
 CC virucide activities. The siRNAs can be used to modulate expression of SCD
 CC genes, in cells, tissue explants or organisms, e.g. for treating obesity;
 CC diabetes (types I and II); atherosclerosis; cancer and viral infections.
 CC They can also be used for drug screening; diagnosis; target
 CC identification and validation; genetic engineering; pharmacogenomics;
 CC studying gene function and gene mapping (e.g. of single-nucleotide
 CC polymorphisms). The present sequence represents an SCD siRNA, which is
 CC used in the exemplification of the present invention.
 XX
 SQ Sequence 21 BP; 7 A; 2 C; 7 G; 2 T; 3 U; 0 Other;
 *Query Match 30.3%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.6;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 3026 ACTGAACTGCTCTCTT 3045
 Db 20 ACTGAACTGCTCTCTT 1

RESULT 12
 ADO14557/C
 ID ADO14557 standard; RNA; 21 BP.
 XX
 AC ADO14557;
 XX
 DT 01-JUL-2004 (first entry)
 XX
 DE Human interleukin-2-targeted siRNA antisense strandSEQ ID NO:303.
 XX
 KW cytostatic; vasoconstrictive; nephrotropic; cancer; restenosis;
 KW polycystic kidney disease; RNA interference;
 KW short interfering nucleic acid; siRNA; short interfering RNA; siRNA;
 KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
 KW expression modulation; gene therapy; drug screening; diagnosis;
 KW therapeutic target identification; pharmacogenomics;
 KW gene function analysis; gene mapping; human; interleukin-2; ss.
 XX
 OS Homo sapiens.
 XX
 PH Key
 FT modified_base 1..8
 FT 1..8
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "2'-O-methyl base"
 FT modified_base 9
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-deoxy-2,-fluoro base"
 FT modified_base 10..11
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-O-methyl base"
 FT modified_base 12
 FT /*tag= d

PR 09-SEP-2002; 2002US-040293P.
 PR 15-JAN-2003; 2003US-0440129P.
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswiggen, J., Beigelman, L., Thompson, J.;
 DR WPI; 2003-731546/69.
 PT New short interfering nucleic acid, useful e.g. for treatment and
 diagnosis of cancer, downregulates expression of an interleukin gene.
 PS Disclosure; SEQ ID NO 305; 138pp; English.
 XX
 CC The invention relates to short interfering nucleic acids (siRNA) which
 downregulate expression of the human interleukin-2 gene by RNA
 interference. The siRNAs may or may not comprise ribonucleotides and may
 be double or single stranded. They further comprise sense and antisense
 regions, or alternatively are assembled from a sense oligonucleotide and
 an antisense oligonucleotide. Specifically, the siRNAs include short
 interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
 hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,
 expressed from a vector or enzymatically synthesized, and can be chemically synthesized,
 relates to kits for the in vitro or in vivo delivery of siRNA, conjugates
 and/or complexes of siRNA, and vectors that express siRNA. The siRNAs are
 used to modulate expression of the interleukin-2 gene in cells, tissue
 explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
 transplants for the treatment of a variety of conditions. They may be
 used for treating cancer, restenosis and polycystic kidney disease. The
 siRNAs are also useful for drug screening, diagnosis, therapeutic target
 identification and validation, genetic engineering, pharmacogenomics,
 CC polymorphisms). The present sequence represents a the antisense strand of
 an exemplary chemically modified human interleukin-2-targeted double-
 stranded siRNA.
 CC
 SQ Sequence 21 BP; 7 A; 2 C; 7 G; 2 T; 3 U; 0 other;
 CC
 Query Match 30.3%; Score 20; DB 1; Length 21;
 Best Local Similarity 100.0%; Pred. No. 6.6;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 3026 ACTGAAACCAGCTCTCTCT 3045
 QD 20 ACTGAAACCAGCTCTCT 1
 DB (RIBO-) RIBOZYME PHARM INC.
 XX
 RESULT 14
 ADO14560/C
 ID ADO14560 Standard; RNA; 21 BP.
 XX
 AC ADO14560;
 XX
 DT 01-JUL-2004 (first entry)
 XX
 DE Human interleukin-2-targeted siRNA antisense strandsSEQ ID NO:306.
 XX
 KW cytostatic; vasoconstrictive; nephrotoxic; cancer; restenosis;
 KW polycystic kidney disease; RNA; interference;
 KW short interfering nucleic acid; siRNA; short; interfering RNA; siRNA;
 KW double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA;
 KW expression modulation; gene therapy; drug screening; diagnosis;
 KW therapeutic target identification; pharmacogenomics;
 KW gene function analysis; gene mapping; human; interleukin-2; ss.
 XX
 OS Homo sapiens.
 XX
 FH Key modified_base
 FT modified_base 1. .8
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Deoxy base"
 FT
 PS Disclosure; SEQ ID NO 306; 138pp; English.
 XX
 CC The invention relates to short interfering nucleic acids (siRNA) which
 downregulate expression of the human interleukin-2 gene by RNA
 interference. The siRNAs may or may not comprise ribonucleotides and may
 be double or single stranded. They further comprise sense and antisense
 regions, or alternatively are assembled from a sense oligonucleotide and
 an antisense oligonucleotide. Specifically, the siRNAs include short
 interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
 hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,
 expressed from a vector or enzymatically synthesized, and can be chemically synthesized,
 relates to kits for the in vitro or in vivo delivery of siRNA, conjugates
 and/or complexes of siRNA, and vectors that express siRNA. The siRNAs are
 used to modulate expression of the interleukin-2 gene in cells, tissue
 explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
 transplants for the treatment of a variety of conditions. They may be
 used for treating cancer, restenosis and polycystic kidney disease. The
 siRNAs are also useful for drug screening, diagnosis, therapeutic target
 linkage is phosphorothioate or phosphorodithioate.
 CC
 PR 11-FEB-2003; 2003WO-US004566.
 XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0353124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0405784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-040293P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI Mcswiggen, J., Beigelman, L., Thompson, J.;
 DR WPI; 2003-731546/69.
 XX
 PT New short interfering nucleic acid, useful e.g. for treatment and
 diagnosis of cancer, downregulates expression of an interleukin gene.
 PS Disclosure; SEQ ID NO 306; 138pp; English.
 XX
 CC The invention relates to short interfering nucleic acids (siRNA) which
 downregulate expression of the human interleukin-2 gene by RNA
 interference. The siRNAs may or may not comprise ribonucleotides and may
 be double or single stranded. They further comprise sense and antisense
 regions, or alternatively are assembled from a sense oligonucleotide and
 an antisense oligonucleotide. Specifically, the siRNAs include short
 interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short
 hairpin RNA (shRNA). The siRNAs can be unmodified or chemically modified,
 expressed from a vector or enzymatically synthesized, and can be chemically synthesized,
 relates to kits for the in vitro or in vivo delivery of siRNA, conjugates
 and/or complexes of siRNA, and vectors that express siRNA. The siRNAs are
 used to modulate expression of the interleukin-2 gene in cells, tissue
 explants or organisms (e.g., by ex vivo gene therapy), or in grafts and
 transplants for the treatment of a variety of conditions. They may be
 used for treating cancer, restenosis and polycystic kidney disease. The
 siRNAs are also useful for drug screening, diagnosis, therapeutic target
 linkage is phosphorothioate or phosphorodithioate.

PR 20-SER-2002; 2002US-0412304P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI McSwiggen J, Beigelman L, Thompson J;
 DR XX
 WPI; 2003-721687/68.

PT New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of obesity or diabetes, downregulates expression of the
 XX
 Disclosure; SEQ ID NO 621; 139pp; English.

CC The present invention describes a short interfering nucleic acid (sINA) that downregulates expression of the SCD (stearoyl-CoA desaturase) gene by RNA interference. Also described: (1) modulating expression of SCD genes in cells, tissue explants or organisms by introduction of sINA; (2) kits for in vitro or in vivo delivery of sINA; (3) conjugates and/or complexes of sINA; and (4) vectors that express sINA. SCD inhibiting sINAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and virucide activities. The sINAs can be used to modulate expression of SCD genes, in cells, tissue explants or organisms, e.g. for treating obesity, diabetes (types I and II); arteriosclerosis; cancer and viral infections. They can also be used for drug screening, diagnosis, target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents an SCD sINA, which is used in the exemplification of the present invention.

XX Sequence 22 BP; 7 A; 2 C; 7 G; 2 T; 3 U; 1 Other;

Query Match 30.3%; Score 20; DB 1; Length 22;
 * Best Local Similarity 100.0%; Pred. No. 6.3;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3026 ACTGAAACCCTCTCTCT 3045
 Db 20 ACTGAAACCCTCTCTT 1

RESULT 17

ADB2768/c
 ID ADE2768 standard; RNA; 22 BP.
 XX
 AC ADE2768;
 XX
 DT 29-JAN-2004 (first entry)

XX
 DB Stearyl-CoA desaturase sINA oligonucleotide SEQ ID NO:623.

XX Short interfering nucleic acid; sINA; downregulation; inhibition; SCD; sstearyl-CoA desaturase; RNA interference; anorectic; antidiabetic; antiarteriosclerotic; cytostatic; virucide; obesity; diabetes; atherosclerosis; cancer; viral infection; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss. OS Synthetic. XX
 XX
 PN WO2003070885-A2.

XX
 PD 28-AUG-2003.
 XX
 PF 13-FEB-2003; 2003WO-US004317.

XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 05-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0402939P.
 PR 20-SEP-2002; 2002US-0412304P.
 PR 15-JAN-2003; 2003US-0440129P.

PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PI McSwiggen J, Beigelman L, Thompson J;
 DR XX
 WPI; 2003-721687/68.

PT New short interfering nucleic acid, useful e.g. for treatment and
 PT diagnosis of obesity or diabetes, downregulates expression of the
 XX
 Disclosure; SEQ ID NO 623; 139pp; English.

CC The present invention describes a short interfering nucleic acid (sINA) that downregulates expression of the SCD (stearoyl-CoA desaturase) gene by RNA interference. Also described: (1) modulating expression of SCD genes in cells, tissue explants or organisms by introduction of sINA; (2) complexes of sINA; and (4) vectors that express sINA. SCD inhibiting sINAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and virucide activities. The sINAs can be used to modulate expression of SCD genes, in cells, tissue explants or organisms, e.g. for treating obesity, diabetes (types I and II); arteriosclerosis; cancer and viral infections. They can also be used for drug screening, diagnosis, target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents an SCD sINA, which is used in the exemplification of the present invention.

XX Sequence 22 BP; 7 A; 2 C; 7 G; 2 T; 3 U; 1 Other;

Query Match 30.3%; Score 20; DB 1; Length 22;
 * Best Local Similarity 100.0%; Pred. No. 6.3;
 Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3026 ACTGAAACCCTCTCT 3045
 Db 20 ACTGAAACCCTCTT 1

RESULT 18

ADB2751/c
 ID ADE2751 standard; RNA; 19 BP.
 XX
 AC ADE2751;
 XX
 DT 29-JAN-2004 (first entry)

XX
 DB Stearyl-CoA desaturase sINA oligonucleotide SEQ ID NO:458.

XX Short interfering nucleic acid; sINA; downregulation; inhibition; SCD; sstearyl-CoA desaturase; RNA interference; anorectic; antidiabetic; antiarteriosclerotic; cytostatic; virucide; obesity; diabetes; atherosclerosis; cancer; viral infection; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss. OS Synthetic. XX
 XX
 PN WO2003070885-A2.

XX
 PD 28-AUG-2003.
 XX
 PF 13-FEB-2003; 2003WO-US004317.

XX
 PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0386782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0402939P.
 PR 20-SEP-2002; 2002US-0412304P.
 PR 15-JAN-2003; 2003US-0440129P.

XX (RIBO-) RIBOZYME PHARM INC.
 PA
 XX
 PT Mcswiggen J, Beigelman L, Thompson J;
 XX DR WPI; 2003-721687/68.
 PT New short interfering nucleic acid, useful e.g. for treatment and
 diagnosis of obesity or diabetes, downregulates expression of the
 stearoyl-CoA desaturase gene.
 XX
 PS Example 3; SEQ ID NO 458; 139pp; English.
 XX The present invention describes a short interfering nucleic acid (sINA) that downregulates expression of the SCD (stearoyl-CoA desaturase) gene by RNA interference. Also described: (1) modulating expression of SCD genes in cells, tissue explants or organisms by introduction of sINA; (2) kits for in vitro or in vivo delivery of sINA; (3) conjugates and/or complexes of sINA; and (4) vectors that express sINA. SCD inhibiting sINAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and virucide activities. The sINAs can be used to modulate expression of SCD genes, in cells, tissue explants or organisms, e.g. for treating obesity, diabetes (types I and II); atherosclerosis; cancer and viral infections. They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents an SCD sINA, which is used in the exemplification of the present invention.
 XX Sequence 19 BP; 3 A; 5 C; 5 G; 0 T; 6 U; 0 Other;
 XX Query Match 28.8%; Score 19; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 8.9;
 * Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX Qy 3009 ACAGATGTCAGGGTCAC 3027
 DB 19 ACAGATGTCAGGGTCAC 1
 XX
 RESULT 19
 ADE27225 ID ADE27225 standard; RNA; 19 BP.
 XX AC ADE27225;
 XX DT 29-JAN-2004 (first entry)
 XX DB Stearyl-CoA desaturase sINA oligonucleotide SEQ ID NO:169.
 XX short interfering nucleic acid; sINA; downregulation; inhibition; SCD; stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic; antiarteriosclerotic; cytostatic; virucide; obesity; diabetes; atherosclerosis; cancer; viral infection; drug screening; generic engineering; pharmacogenomic; gene mapping; ss. synthetic.
 XX OS
 XX PN WO2003070885-A2.
 XX PD 28-AUG-2003.
 XX PP 13-FEB-2003; 2003WO-US004317.
 XX PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0366782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 09-SEP-2002; 2002US-0409239P.
 PR 20-SEP-2002; 2002US-0412304P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PT Mcswiggen J, Beigelman L, Thompson J;
 XX DR WPI; 2003-721687/68.
 PT New short interfering nucleic acid, useful e.g. for treatment and
 diagnosis of obesity or diabetes, downregulates expression of the
 stearoyl-CoA desaturase gene.
 XX
 PS Example 3; SEQ ID NO 169; 139pp; English.
 XX The present invention describes a short interfering nucleic acid (sINA) that downregulates expression of the SCD (stearoyl-CoA desaturase) gene by RNA interference. Also described: (1) modulating expression of SCD genes in cells, tissue explants or organisms by introduction of sINA; (2) kits for in vitro or in vivo delivery of sINA; (3) conjugates and/or complexes of sINA; and (4) vectors that express sINA. SCD inhibiting sINAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and virucide activities. The sINAs can be used to modulate expression of SCD genes, in cells, tissue explants or organisms, e.g. for treating obesity, diabetes (types I and II); atherosclerosis; cancer and viral infections. They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents an SCD sINA, which is used in the exemplification of the present invention.
 XX Sequence 19 BP; 3 A; 7 C; 2 G; 0 T; 7 U; 0 Other;
 XX Query Match 28.8%; Score 19; DB 1; Length 19;
 Best Local Similarity 63.2%; Pred. No. 8.9;
 * Matches 12; Conservative 7; Mismatches 0; Indels 0; Gaps 0;
 XX Qy 3027 CTGAGACCCTGCTCTCT 3045
 DB 1 CUGAACACUGCUCUCU 19
 XX
 RESULT 20
 ADE27223 ID ADE27223 standard; RNA; 19 BP.
 XX AC ADE27223;
 XX DT 29-JAN-2004 (first entry)
 XX DB Stearyl-CoA desaturase sINA oligonucleotide SEQ ID NO:167.
 XX short interfering nucleic acid; sINA; downregulation; inhibition; SCD; stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic; antiarteriosclerotic; cytostatic; virucide; obesity; diabetes; atherosclerosis; cancer; viral infection; drug screening; generic engineering; pharmacogenomic; gene mapping; ss. synthetic.
 XX OS
 XX PN WO2003070885-A2.
 XX PD 28-AUG-2003.
 XX PP 13-FEB-2003; 2003WO-US004317.
 XX PR 20-FEB-2002; 2002US-0358580P.
 PR 11-MAR-2002; 2002US-0363124P.
 PR 06-JUN-2002; 2002US-0366782P.
 PR 29-AUG-2002; 2002US-0406784P.
 PR 05-SEP-2002; 2002US-0408378P.
 PR 20-SEP-2002; 2002US-0412304P.
 PR 15-JAN-2003; 2003US-0440129P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.

XX
PT McSwiggen, J., Beigelman, L., Thompson, J.;
XX
XX
DR
XX
WPI; 2003-721687/68.

PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of obesity or diabetes, downregulates expression of the
XX
PT stearoyl-CoA desaturase gene.

PS Example 3; SEQ ID NO 167; 139pp; English.

XX
CC The present invention describes a short interfering nucleic acid (sINA) that downregulates expression of the SCD (stearoyl-CoA desaturase) gene by RNA interference. Also described: (1) modulating expression of SCD genes in cells, tissue explants or organisms by introduction of sINA; (2) kits for in vitro or in vivo delivery of sINA; (3) conjugates and/or complexes of sINA; and (4) vectors that express sINA. SCD inhibiting sINAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and viricide activities. The sINAs can be used to modulate expression of SCD genes, in cells, tissue explants or organisms, e.g. for treating obesity, diabetes (types I and II); arteriosclerosis; cancer and viral infections. They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents an SCD sINA, which is used in the exemplification of the present invention.

XX
SQ Sequence 19 BP; 3 A; 9 C; 4 G; 0 T; 3 U; 0 Other;

* Query Match 28.8%; Score 19; DB 1; Length 19;
- Best Local Similarity 84.2%; Pct. No. 8.9%;
- Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

OY 2991 GCGAGCTCCCTCTGACA 3009
Db 1 GCGAGCUCCUCUGACCA 19

RESULT 21

ADE2713/c
ID ADE2713 standard; RNA; 19 BP.
XX
AC ADE2713;
XX
DT 29-JAN-2004 (first entry)

DE Stearoyl-CoA desaturase sINA oligonucleotide SEQ ID NO:457.
XX
KW short interfering nucleic acid; sINA; downregulation; inhibition; SCD;
KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
KW arteriosclerosis; cytostatic; viricide; obesity; diabetes;
KW atherosclerosis; cancer; viral infection; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
OS Synthetic.

XX
PN WO2003070885-A2.
XX
PD 28-AUG-2003.
XX
PF 13-FEB-2003; 2003WO-US004317.

XX
PR 20-FEB-2002; 2002US-0158580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0419293P.

PR 20-SEP-2002; 2002US-0412204P.

PR 15-JAN-2003; 2003US-0440129P.

XX
PA (RIBO-) RIBOZYME PHARM INC.

XX
PA
XX

PI McSwiggen, J., Beigelman, L., Thompson, J.;
XX
XX
DR
XX
WPI; 2003-721687/68.

PT New short interfering nucleic acid, useful e.g. for treatment and
PT diagnosis of obesity or diabetes, downregulates expression of the
XX
PT stearoyl-CoA desaturase gene.

PS Example 3; SEQ ID NO 457; 139pp; English.

XX
CC The present invention describes a short interfering nucleic acid (sINA) that downregulates expression of the SCD (stearoyl-CoA desaturase) gene by RNA interference. Also described: (1) modulating expression of SCD genes in cells, tissue explants or organisms by introduction of sINA; (2) kits for in vitro or in vivo delivery of sINA; (3) conjugates and/or complexes of sINA; and (4) vectors that express sINA. SCD inhibiting sINAs have anorectic, antidiabetic, antiarteriosclerotic, cytostatic and viricide activities. The sINAs can be used to modulate expression of SCD genes, in cells, tissue explants or organisms, e.g. for treating obesity, diabetes (types I and II); arteriosclerosis; cancer and viral infections. They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents an SCD sINA, which is used in the exemplification of the present invention.

XX
SQ Sequence 19 BP; 3 A; 4 C; 9 G; 0 T; 3 U; 0 Other;

* Query Match 28.8%; Score 19; DB 1; Length 19;
- Best Local Similarity 100.0%; Pct. No. 8.9%;
- Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 2991 GCGAGCTCCCTCTGACA 3009
Db 19 GCGAGCTCCCTCTGACA 1

RESULT 22

ADE2724
ID ADE2724 standard; RNA; 19 BP.
XX
AC ADE2724;
XX
DT 29-JAN-2004 (first entry)

DE Stearoyl-CoA desaturase sINA oligonucleotide SEQ ID NO:168.
XX
KW short interfering nucleic acid; sINA; downregulation; inhibition; SCD;
KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;
KW arteriosclerosis; cytostatic; viricide; obesity; diabetes;
KW atherosclerosis; cancer; viral infection; drug screening;
KW genetic engineering; pharmacogenomic; gene mapping; ss.
OS Synthetic.

XX
PN WO2003070885-A2.

XX
PD 28-AUG-2003.

XX
PF 13-FEB-2003; 2003WO-US004317.

XX
PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-0386782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0408378P.

PR 09-SEP-2002; 2002US-0419293P.

PR 20-SEP-2002; 2002US-0412204P.

PR 15-JAN-2003; 2003US-0440129P.

XX
PA (RIBO-) RIBOZYME PHARM INC.

XX
PA
XX

XX DR WPI; 2003-721687/68.

XX PT New short interfering nucleic acid, useful e.g. for treatment and diagnosis of obesity or diabetes, downregulates expression of the

PT PT stearyl-CoA desaturase gene.

XX XX PS Example 3; SEQ ID NO 168; 139pp; English.

The present invention describes a short interfering nucleic acid (sINA) that downregulates expression of the SCD (stearoyl-CoA desaturase) gene by RNA interference. Also described: (1) modulating expression of SCD genes in cells, tissue explants or organisms by introduction of sINA; (2) kits for in vitro or in vivo delivery of sINA; (3) conjugates and/or complexes of sINA; and (4) vectors that express sINA. SCD inhibiting sINAs have anorectic, antidiabetic, antiatherosclerotic, cyclooxygenase and virucide activities. The sINAs can be used to modulate expression of SCD genes, in cells, tissue explants or organisms, e.g. for treating obesity, diabetes (types I and II); atherosclerosis; cancer and viral infections. They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents an SCD sINA, which is used in the exemplification of the present invention.

XX XX SQ Sequence 19 BP; 6 A; 5 C; 5 G; 0 T; 3 U; 0 Other;

Query Match 28.8%; Score 19; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.9;
Matches 16; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 3009 ACAGAATGTCAGGTAC 3027
DQ 1 ACAGAAUGCUAGGUCAC 19

DR WPI; 2003-721687/68.

XX PT New short interfering nucleic acid, useful e.g. for treatment and diagnosis of obesity or diabetes, downregulates expression of the

PT PT stearyl-CoA desaturase gene.

XX XX PS Example 3; SEQ ID NO 459; 139pp; English.

The present invention describes a short interfering nucleic acid (sINA) that downregulates expression of the SCD (stearoyl-CoA desaturase) gene by RNA interference. Also described: (1) modulating expression of SCD genes in cells, tissue explants or organisms by introduction of sINA; (2) kits for in vitro or in vivo delivery of sINA; (3) conjugates and/or complexes of sINA; and (4) vectors that express sINA. SCD inhibiting sINAs have anorectic, antidiabetic, antiatherosclerotic, cyclooxygenase and virucide activities. The sINA can be used to modulate expression of SCD genes, in cells, tissue explants or organisms, e.g. for treating obesity, diabetes (types I and II); atherosclerosis; cancer and viral infections. They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents an SCD sINA, which is used in the exemplification of the present invention.

XX XX SQ Sequence 19 BP; 7 A; 2 C; 7 G; 0 T; 3 U; 0 Other;

Query Match 28.8%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 8.9;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 3027 CTGAAACCTGCTCT 3045
DQ 19 CTGAAACCTGCTCT 1

Search completed: March 27, 2006, 08:28:38
Job time : 0.001 secs

RESULT 23

XX ADB27515/C ADB27515 standard; RNA; 19 BP.

XX ID ADB27515;

XX AC 29-JAN-2004 (first entry)

XX DE Stearyl-CoA desaturase sINA oligonucleotide SEQ ID NO:459.

XX KW short interfering nucleic acid; sINA; downregulation; inhibition; SCD;

KW stearoyl-CoA desaturase; RNA interference; anorectic; antidiabetic;

KW antiatherosclerotic; cytotoxic; viricide; obesity; diabetes;

KW atherosclerosis; cancer; viral infection; drug screening;

KW genetic engineering; pharmacogenomic; gene mapping; ss.

XX OS Synthetic.

XX PN WO2003070885-A2.

XX PD 28-AUG-2003.

XX PF 13-FEB-2003; 2003WO-US004317.

XX PR 20-FEB-2002; 2002US-0358580P.

PR 11-MAR-2002; 2002US-0363124P.

PR 06-JUN-2002; 2002US-03867782P.

PR 29-AUG-2002; 2002US-0406784P.

PR 05-SEP-2002; 2002US-0403378P.

PR 09-SEP-2002; 2002US-0402293P.

PR 20-SEP-2002; 2002US-0412304P.

PR 15-JAN-2003; 2003US-0440129P.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PI McSwiggen J, Beigelman L, Thompson J;

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